Applicant: William Turner
Preliminary Amendment

## Amendment to the Claims:

## 1-40. (Cancelled)

- 41. (New) An electric guitar, comprising:
  - a solid body;
  - a plurality of strings disposed along the solid body; and
  - a pickup disposed on the solid body, the pickup including,
    - (a) upper and lower bobbins,
- (b) a first wire coil wrapped around the upper bobbin in a first direction,
- (c) a second wire coil wrapped around the lower bobbin in a second direction opposite to the first direction to produce a humbucking effect,
- (d) a ferromagnetic plate disposed between the upper and lower bobbins and having sufficient thickness to substantially isolate magnetic lines of force existing on either side of the ferromagnetic plate,
- (e) a plurality of permanent magnetic rods each disposed under one of the plurality of strings, the plurality of permanent magnetic rods extending through the upper and lower bobbins and through a plurality of openings in the ferromagnetic plate, and
- (f) a plurality of ferromagnetic slugs disposed in openings of the upper and lower bobbins linearly between ones of the plurality of permanent magnetic rods to alter inductance of the pickup.

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- 42. (New) The electric guitar of claim 41, wherein the plurality of ferromagnetic slugs are interchangeable from the upper and lower bobbins.
- 43. (New) The electric guitar of claim 41, wherein the plurality of ferromagnetic slugs are made of steel.
- 44. (New) The electric guitar of claim 41, wherein the ferromagnetic plate is between 0.125 and 0.187 inches thick.
- 45. (New) The electric guitar of claim 41, wherein magnetic lines of force extend outwardly from north poles of the plurality of permanent magnetic rods through the plurality of strings and through the first wire coil and substantially terminate on an upper surface of the ferromagnetic plate.
- 46. (New) The electric guitar of claim 41, wherein the ferromagnetic plate magnetically separates the first wire coil from the second wire coil.
- 47. (New) The electric guitar of claim 41, further including:
  a first side plate coupled to a first side of the lower
  bobbin to cover the second wire coil and extending past the
  ferromagnetic plate; and
- a second side plate coupled to a second side of the lower bobbin to cover the second wire coil and extending past the ferromagnetic plate.
- 48. (New) A pickup for an electric guitar, comprising: upper and lower bobbins;

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- a first wire coil wrapped around the upper bobbin in a first direction;
- a second wire coil wrapped around the lower bobbin in a second direction opposite to the first direction to produce a humbucking effect;
- a ferromagnetic plate disposed between the upper and lower bobbins and having sufficient thickness to substantially isolate magnetic lines of force existing on either side of the ferromagnetic plate;
- a plurality of permanent magnetic rods extending through the upper and lower bobbins and through a plurality of openings in the ferromagnetic plate; and
- a ferromagnetic slug disposed in the upper or lower bobbin linearly between ones of the plurality of permanent magnetic rods to alter inductance of the pickup.
- 49. (New) The pickup of claim 48, wherein the ferromagnetic slug is interchangeable from the upper or lower bobbin.
- 50. (New) The pickup of claim 48, wherein the ferromagnetic slug is made of steel.
- 51. (New) The pickup of claim 48, wherein the ferromagnetic plate is between 0.125 and 0.187 inches thick.
- 52. (New) The pickup of claim 48, wherein the ferromagnetic plate is made of steel.
- 53. (New) The pickup of claim 48, wherein magnetic lines of force extend outwardly from north poles of the plurality of

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permanent magnetic rods through the first wire coil and substantially terminate on an upper surface of the ferromagnetic plate.

54. (New) The pickup of claim 48, further including:

a first side plate coupled to a first side of the lower bobbin to cover the second wire coil and extending past the ferromagnetic plate; and

a second side plate coupled to a second side of the lower bobbin to cover the second wire coil and extending past the ferromagnetic plate.

55. (New) A method of making a pickup for a musical instrument, comprising:

providing upper and lower bobbins;

wrapping a first wire coil around the upper bobbin; wrapping a second wire coil around the lower bobbin;

disposing a ferromagnetic plate between the upper and lower bobbins, wherein the ferromagnetic plate has sufficient thickness to substantially isolate magnetic lines of force existing on either side of the ferromagnetic plate;

extending a plurality of permanent magnetic rods through the upper and lower bobbins and through a plurality of openings in the ferromagnetic plate; and

disposing a ferromagnetic slug in the upper or lower bobbin between ones of the plurality of permanent magnetic rods to alter inductance of the pickup.

56. (New) The method of claim 55, wherein the ferromagnetic slug is interchangeable from the upper or lower bobbin.

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- 57. (New) The method of claim 55, wherein the ferromagnetic slug is made of steel.
- 58. (New) The method of claim 55, wherein the ferromagnetic plate is between 0.125 and 0.187 inches thick.
- 59. (New) The method of claim 55, further including:

  attaching a first side plate to a first side of the lower
  bobbin to cover the second wire coil and extend past the
  ferromagnetic plate; and

attaching a second side plate to a second side of the lower bobbin to cover the second wire coil and extend past the ferromagnetic plate.